STATE OF MONTANA JOB VACANCY An Equal Opportunity Employer 6 Page Document

Department of Transportation Human Resources 2701 Prospect Avenue PO Box 201001 Helena, Montana 59620-1001

May 23, 2008 Internal/External

Position Title: Civil Engineer Specialist

Working Title: District Geotechnical Engineer

Position Number: 54140002 Classification Code: 172537 Work Comp Code: 9411

Bargaining Unit/Code: MGMT 0009

Division: Engineering/Materials Bureau/GeoTech

Location: Helena

Job Status: FT/Permanent Work Shift: As assigned Area Code: 029/045

Supervisor: Rich Jackson

Band/Grade: Band 7

Salary: \$58,748 Annually

Salary will be set in accordance with the 020 Pay Plan Rules.

Supplement: No

Closing Date: Open until filled.

Review of applications will begin June 6, 2008.

Application Deadline

Application materials from interested Department of Transportation employees must be submitted online or received in the Human Resources office in Helena by 5:00 p.m. on the closing date.

In-state and out-of-state applications are due by 5:00 p.m. Mountain Time on the closing date. You can apply for this position online. Alternatively, you can mail a completed State Application Form (PD-25) to the address shown above or to a local Montana Job Service Workforce Center.

Please visit the MDT website at http://www.mdt.mt.gov/jobs/ for additional employment opportunities and information.

This position may qualify for reimbursement under the Moving and Relocation Expense Policy (3-0151).

Consideration may be given to filling the position with a training assignment. Engineers with FE certification and related education and experience who may qualify for PE certification are encouraged to apply.

Application and Selection Process:

Factors to be considered in evaluating an applicant's qualifications will include the following:

- 1. An evaluation of the Montana State application form (PD-25) or the MDT Application form (available on-line at www.mdt.mt.gov/jobs) for minimum qualifications.
- 2. A training and experience evaluation (Pass/Fail)
- 3. A structured interview (Pass/Fail)
- 4. Confirmation of current or potential professional certification.
- 5. Reference checks.

All applicants must submit the following documents by the closing date to be considered for this position. These documents will be used to evaluate your qualifications.

A signed and completed State of Montana Application (PD-25) or the MDT Application form (available on-line at www.mdt.mt.gov/jobs).

An employment preference is available to eligible veterans, disabled veterans, handicapped civilians, and spouses of certain veterans and handicapped civilians. If claiming preference, the employment preference form (PD-25A, 12/93) plus the DD-214 (and DPHHS certification, if appropriate) must be submitted with the application.

Note: Applicant must complete ALL sections of the state application.

Failure to submit completed application materials as specified above will result in disqualification from the selection process. Late applications will be disqualified.

Transcripts: If you have attended or graduated from a college, university, community college, vocational-technical, or other school beyond high school, you are encouraged to submit grade transcripts because they help determine whether you are qualified to continue in the selection process. If you have a master's degree, include transcripts for both your master's and your bachelor's degrees.

If you are the successful candidate, and the position for which you applied requires a degree(s), or you used a degree to meet position qualifications, you will be REQUIRED to produce a copy of the official transcript(s), which must show the degree(s) and date(s) awarded, as a condition of employment.

Description of Position

This position conducts professional geotechnical engineering analysis and design. The incumbent evaluates project plans; establishes guidelines, procedures, and parameters for various projects and activities; plans and oversees a variety of investigation, sampling, and engineering projects; provides advanced technical assistance to a variety of individuals and agencies involved with ongoing road construction projects; and performs a variety of other duties in support of the Department goals and Division objectives. The incumbent reports to one of the District Geotechnical Managers and to the Geotechnical Engineer.

This position provides advanced professional engineering analysis and final design service for geotechnical aspects of Department road and bridge construction projects. The geotechnical engineering specialist evaluates overall project purpose and requirements to determine geotechnical issues and impacts; establishes analytical procedures and conducts engineering analyses; designs alternatives and approached to complex geotechnical problems; organizes and writes comprehensive reports to present findings and recommendations; designs field exploration plans and directs subsurface investigations; reviews, modifies plans and analyses developed by other members of the Geotechnical Section, and attends and conducts reviews and conferences to discuss, coordinate, and develop solutions to geotechnical problems. This requires thorough knowledge of the concepts and theories of geotechnical engineering, geology, mathematics, the physical sciences, and highway and bridge design; methods and practices of highway construction and construction engineering; engineering policy; materials properties, specifications, and test methods; and construction safety practices. The position also requires considerable knowledge of traffic engineering; highway economic, safety, and efficiency issues; Engineering Division objectives and Material Bureau goals; project planning; research methods and techniques; highway construction methods and techniques; transportation planning, design, and highway construction processes; field applications of highway engineering and construction; environmental rules and regulations; and construction methods and practices. These duties also require advanced skill in reading and interpreting complex plans and contract documents, interpreting and writing specifications as well as the ability to use logical and understandable approaches to analyzing geotechnical projects; plan and manage numerous phases of multiple projects; interpret complex designs, plans, drawings, statutes, and regulations; apply analysis and judgment in arriving at solutions to difficult engineering research, and contract problems; exercise professional judgment to arrive at timely decisions in complex situations.

This position provides planning for Section projects to ensure the most efficient, cost-effective, and otherwise appropriate use of human and material resources. This includes establishing guidelines and parameters for site-specific geotechnical studies; conducting technical reviews of construction plans to verify appropriate incorporation of geotechnical considerations and recommendations; developing solutions to a broad range

of engineering deficiencies and problems; designing and administering a Laboratory Testing Program; and providing on-site and remote geotechnical engineering advice and technical assistance to a variety of parties. These duties also require the incumbent to apply skills in communication and negotiation; developing and administering a variety of diverse projects and functions; and developing ideas and solutions for complex problems. Including coordinating with consultants, reviews analytical results, methodologies, and recommendations from consultants to verify the scientific and logical integrity of procedures, results, and conclusions. The incumbent identifies and resolves errors or deficiencies through critical review of reports and documentation, site investigations, and personal consultations and negotiations. The analysis consists of three components: the Preliminary Engineering Evaluation review, the Geotechnical Survey and Reports review, and the Geotechnical Engineering Final review.

Perform a variety of other engineering, project management, and other activities assigned by the Geotechnical Engineer or the Geotechnical District Manager in support of the Department mission and Division objectives. This includes exchanging information with contractors, agency staff, and the public; providing professional and technical assistance; directing special projects' participating in state, interstate, and federal research programs; and attending ongoing education and training as needed

Job Requirements

KNOWLEDGE: Extensive knowledge of the concepts and theories of engineering, geology, mathematics, the physical sciences, and highway and bridge design; methods and practices of highway construction and construction engineering; engineering policy, materials properties, specifications, and test methods; and construction safety practices. Thorough knowledge of contract law and contract administration, traffic engineering; highway economic, safety, and efficiency issues; Engineering Division objectives and Materials Bureau goals; project planning; research methods and techniques; State, federal AASHTO, and FHWA requirements and standards; project specifications; Montana Materials manual, Construction Manual, Traffic Engineering Manual, Standard Specifications for Road and Bridge Construction, and a variety of other specialized engineering manuals and documentation; highway construction methods and techniques; transportation planning, design, and highway construction processes; field applications of highway engineering and construction; environmental rules and regulations; and construction methods and practices.

SKILLS: Skill in reading and interpreting complex plans, specifications, and contract documents; project management; drawing conclusions and making recommendations; assessing construction plans and projects; communication and negotiation; developing and administering a variety of diverse projects and functions; and developing solutions for complex problems.

Behaviors required:

Leadership: Provides clear directions, technical assistance, and guidance to District and Department staff, contractors, consultants, and others to ensure effective operations and project activities. Motivates subordinate staff and coworkers to achieve common objectives. Appropriately delegates responsibilities to staff.

Analytical/Interpretive Thinking: Accurately applies new research findings, technical analyses, new methods and technologies, engineering standards, and project requirements to specific circumstances.

Decision Making: Evaluates multiple factors to resolve problems. Develops technical and legal courses of action in response to complex or ambiguous geotechnical engineering issues; research conclusions and recommendations; and project management problems.

Achievement: Achieves goals and brings projects to completion. Persists and stays focused when faced with a series of challenging or uncertain situations. Demonstrates a concern for working well or for competing against a standard of excellence.

Independence of Action: Determines appropriate responses to geotechnical project problems and opportunities with minimal assistance or precedent.

Education and Experience: Bachelor's Degree in Civil Engineering, Geology, or a related engineering degree recognized as eligible for PE/PG licensing. A Master's degree in any of the above listed degree fields, in conjunction with a Bachelor's degree in one of the acceptable/related degrees, may substitute for two years of required experience AND five (5) years experience in civil or geological engineering or a related engineering field. This should include a minimum of two (2) years geotechnical engineering experience related to highways, structures, slopes, or similar facilities.

<u>Certification:</u> Certification as a Professional Engineer(P.E.) or Professional Geologist(P.G.) is required as this position reviews, approves and signs engineering analyses on behalf of the Department.

The State of Montana makes reasonable accommodations for any known disability that may interfere with an applicant's ability to compete in the recruitment and selection process or an employee's ability to perform the essential duties of the job. For the State to consider any such accommodation, the applicant must make known any needed accommodation.

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 444-6331 or TTY (800) 335-7592, or by calling Montana Relay at 711.

In compliance with the Immigration Reform Control Act, Public Law 99-603, the successful applicant will be required to supply documentation within 3 days of hire proving that he/she is eligible to work in the United States. Examples of documentation include a social security card along with a driver's license or other picture ID, a US passport or a green card. The Department of Transportation does not sponsor H1B Visa Petitions. To be eligible for permanent employment with the Department, an applicant must have a current US Green Card.

In accordance with the Montana compliance with military selective service act, males new to state government employment must produce documentation showing compliance with the federal military selective service act. Examples of this documentation include a registration card issued by selective service, a letter from selective service showing a person was not required to register, or information showing by a preponderance of evidence that a person's failure to register with selective service was not done knowingly or willfully.

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